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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/507,868	02/22/2000	Harald Lichinger	99P7471US01	2972

24500 7590 04/29/2003

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EXAMINER

MCCALL, ERIC SCOTT

ART UNIT	PAPER NUMBER
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2855

DATE MAILED: 04/29/2003

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 21

Application Number: 09/507,868
Filing Date: February 22, 2000
Appellant(s): LICHTINGER ET AL.

Kerrie A. Laba
For Appellant

MAILED
APR 29 2003
GROUP 2800

EXAMINER'S ANSWER

This is in response to the appeal brief filed Feb. 06, 2003.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

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(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

In view of the Appellant's arguments, claim 28 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In view of the Appellant's arguments, claims 19 and 20 are allowed.

As such, the statement of the status of the pending claims contained in the brief is incorrect. A correct statement of the status of the pending claims is as follows:

Claims 1-7, 24-27, 29, and 31-37 stand rejected under 35 USC 102(e).

Claims 21, 30, and 38 stand rejected under 35 USC 103(a).

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) Issues

The Appellant's statement of the issues in the brief is substantially correct. The changes are as pointed out above with respect to the status of the claims, ie. the rejection of claims 19, 20, and 28 under 35 USC 102(e) over Verma et al. (5,942,695) has been withdrawn.

(7) Grouping of Claims

Appellant's brief includes a statement that the claims as grouped do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,942,695

Verma et al.

8-1999

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

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35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-7, 24-27, 29, and 31-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Verma et al. (5,942,695).

With respect to the Appellant's claim grouping of claims 1-4 and 24, the Examiner hereby focuses on the Appellant's claim 1.

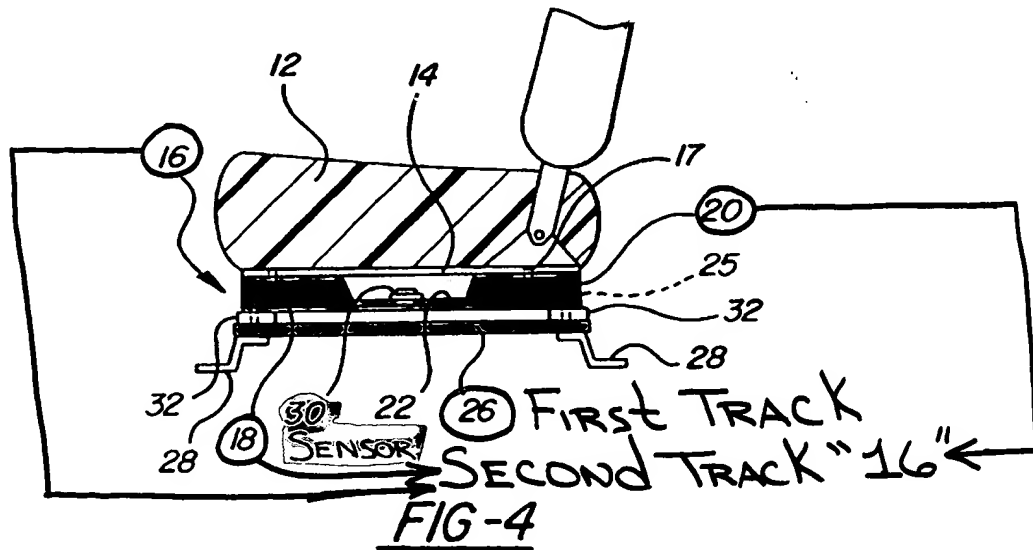
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As such, Verma et al. teach a system for measuring weight of an occupant seated on a vehicle seat (see fig. 4 of Verma et al. as shown below) comprising:

a first track (26) mounted to a vehicle structure (ie. vehicle floor);

a second track (16) supported for movement relative to said first track for adjustment along a longitudinal axis (col. 2, lines 19-21; ie. the second track slides forward and back with respect to the first track) and being deflectable in a vertical direction due to an occupant weight force generated by the occupant sitting on the vehicle seat (col. 2, lines 29-36 and 50-53); and

at least one sensor (30) mounted on one of said tracks for generating a signal representative of said occupant weight force (col. 1, lines 33-37).



With respect to the Appellant's claim grouping of claim 5 by itself, Verma et al. clearly teach in the embodiment (ie. fig. 4) relied upon by the Examiner, that the sensor (30) is positioned at the center of the second track (16), and thus Verma et al. clearly teach that the "sensor is positioned along said central track portion" as is claimed.

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With respect to the Appellant's claim grouping of claims 6 & 7, the Examiner hereby focuses on the Appellant's claim 6.

With respect to claim 6, Verma et al. teach, in the form of an alternate embodiment as shown in fig. 1, that the sensor may be comprised of a first sensor (30) positioned forward of the center of the second track (16) and a second sensor (30) positioned rearward of the center of the second track (16). Nonetheless, the first and second sensors measure deflection of the second track just as does the other embodiments and just as claimed by the Appellant.

With respect to the Appellant's claim grouping of claims 25, 26, and 29, the Examiner hereby focuses on the Appellant's claim 25.

With regards to claim 25, the Examiner first points out that the first and second tracks as shown by Verma et al. in fig. 4 are interpreted as an "inboard track assembly" as claimed by the Appellant. Furthermore, it is inherent that the Verma et al. teaching would include an "outboard track assembly" which is interpreted as the very same first and second track assemblies as shown in fig. 4 only on the opposite side of the seat (ie. fig. 4 shows the left side of the seat however the right side of the seat is a mirror image of the left side). For if no outboard track assembly complimented the inboard track assembly the vehicle seat would not sit upright (ie. a seat has four feet).

As such, since the track assemblies on one side of the seat are a mirror image of the track assemblies of the other side of the seat, the Examiner arguments pertaining to the track assembly on one side of the seat would also apply to other side of the seat.

Fig. 4 clearly shows the second track (16), wherein the second track is interpreted as part of a "track assembly", having a forward end and a rearward end with a central portion in between. The central portion is that which houses the sensor assemblies; the first sensor assembly mounted on the inboard track assembly and the second sensor assembly mounted on the outboard track assembly. The forward and rearward ends are clearly larger than the central portion. Thus, the cross-sectional area of the central portion would be clearly smaller than the cross-sectional area of the end portions. Furthermore, the cross-sectional area of the end portions is interpreted as the "predetermined cross-sectional area" as claimed by the Appellant because the Appellant has never set forth what the "predetermined cross-sectional area" is in reference to or the size of such an area.

With respect to the Appellant's claim grouping of claim 27, the Examiner points out that the above rejection pertaining to claim 25 clearly addresses the claimed subject matter at hand and clearly points out that the cross-sectional area of the central portion is less than a predetermined cross-sectional area as claimed.

With respect to the Appellant's claim grouping of claims 31 and 32, the Examiner hereby focuses on the Appellant's claim 31.

As such, Verma et al. teach a method for determining weight of a seat occupant (see fig. 4 of Verma et al.) comprising the steps of:

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providing a first track (26) mounted to a vehicle structure and providing a second track (16) supported for movement relative to said first track to form a first track “assembly” (col. 2, lines 19-21; ie. the second track slides forward and back with respect to the first track)

mounting a first sensor assembly (30) to the first track assembly (as claimed, the first track “assembly” is made up of the first track and the second track, thus even though the sensor is mounted directly on the second track, it is nonetheless mounted to the first track “assembly”);

generating a first signal from the first sensor assembly in response to deflection of the first track “assembly” due to seat occupant weight generated by the occupant sitting on the vehicle seat (col. 2, lines 29-36 and 43-53); and

determining seat occupant weight based on said first signal (col. 1, lines 33-37).

With respect to the Appellant’s claim grouping of claims 33-35, the Examiner hereby focuses on the Appellant’s claim 33.

In claim 33, the Appellant has set forth that the first and second track “assemblies” are defined by a predetermined cross-sectional area and each track “assembly” has at least one track segment with a cross-sectional area that is less than the predetermined cross-sectional area. As such, the Examiner points out that the first track “assembly” (ie. made up of the first track 26 and second track 16) and the second track “assembly” (ie. the mirror image of the first track assembly only on the opposite side of the seat) inherently have a predetermined cross-sectional area. Furthermore, each track assembly contains the segment (22), whereon the sensor (30) is

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mounted, that is less than the predetermined cross-sectional area because the segment (22) is clearly more narrow than the rest of the assembly (fig. 4).

With respect to the Appellant's claim grouping of claim 36, the Examiner points out that the track segment as claimed is taught by the prior art (fig. 4).

With respect to the Appellant's claim grouping of claim 37, Verma et al. teach, in the form of an alternate embodiment as shown in fig. 1, that the sensor may be comprised of a first sensor (30) mounted rearwardly within the first track "assembly" and a second sensor (30) mounted forwardly within the first track "assembly"

Furthermore, Verma et al. suggest a mirror image of the structure shown in fig. 1 (ie. left side of the seat) for the opposite side (ie. right side) of the seat. Thus, the first and second tracks on the opposite side of the seat would constitute the second track "assembly" wherein the second track "assembly" would mirror the first track "assembly" and therefore include third and fourth sensors as claimed.

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35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 30, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verma et al. (5,942,695).

With respect to the Appellant's claim grouping of claims 21 and 30, the Examiner hereby focuses on the Appellant's claim 21.

As such, Verma et al. teach a sensor (30) being attached to, what has been deemed as, a second track (16). Verma et al. fail to teach the sensor being attached to, what has been deemed as, the first track (26).

Nonetheless, it would have been obvious to one having ordinary skill in the art armed with said teaching to place the sensor (30) of Verma et al. on their first track (26) instead of their second track (16).

The motivation being that Verma et al. teach the measurement of a deflection of a track in order to determine seat occupant weight wherein the first track (26) is connected to and in a parallel relationship with the second track (16). Thus, when the second track flexes, as is taught,

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the first track will flex as well. This is a result of a downward force being applied to the seat (ie. a person sitting in the seat) and the fact that the tracks are movably connected to one another at their ends. In short, when someone sits in the seat, both tracks will flex, maybe not of the same extent but nonetheless both tracks will flex. Thus, it would have been within the realm of one having ordinary skill in the art that both tracks will flex and either could be used to mount a sensor to determine occupant seat weight.

With respect to the Appellant's claim grouping of claim 38, the very same argument that applies above with respect to claim 21 would also apply to claim 38.

(11) *Response to Argument*

First and foremost, the Examiner has maintained the position that element 16 of the prior art, explicitly referred to in the prior art as a bracket, can be and is interpreted as a "track" and more specifically as a "second track" as claimed by the Appellant. As such, the corresponding rejection centers around such interpretation, yet the Appellant has not presented any arguments as to why the element 16 can not be interpreted as a "track".

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The Appellant's arguments which begin on page 8 of the Appeal Brief will be addressed accordingly.

In response to the Appellant's arguments on page 8 with respect to the claims 1-4 and 24 as grouped, the Appellant has recognized that the prior art sets forth various embodiments. The Appellant goes on to state that none of the embodiments show mounting strain gauges to seat tracks.

The Examiner points out that in the prior art's embodiment shown in fig. 4, strain gauges are mounted to the brackets 16. However, the brackets 16 are interpreted and thus deemed as a "track" as claimed. The prior art clearly sets forth (col. 2, lines 20-22) that the brackets 16 are mounted on tracks 26 (ie. the "first track") which allows fore and aft adjustment of the seat. As such, the brackets 16, themselves, are interpreted as a track because in the vehicle structure art such brackets which move back and forth with respect to and while attached to a track are also known as a "track" because one element moves relative to the other element and as such it is common that the entire assembly, ie. the two tracks combined, is referred to and known as a "track".

Furthermore, the Appellant argues that the prior art does not "show mounting the strain gauges to the seat tracks". The Appellant has admitted that element 26 are seat tracks. In response, the Examiner points out, assuming the Appellant's position, that even if the brackets 16 were not interpreted as seat tracks, the prior art would still teach mounting the strain gauges to the seat tracks because the brackets which house the sensors 30 are attached to seat tracks. Therefore, the strain gauges are "mounted to the seat tracks" as argued, maybe not directly

mounted to the seat tracks but nonetheless, mounted to the seat tracks because the sensors 30 are mounted to the brackets 16 and the brackets are mounted to the seat tracks 26.

In response to the Appellant's final arguments pertaining to the prior art's background of the invention, the prior art is disclosing that which was known in the art at the time of the prior art's invention, and it in no way suggests that the prior art teaches away from or does not anticipate the Appellant's claim 1.

In response to the Appellant's arguments pertaining to claim 5, the Appellant first states the limitations of claim 5. The Examiner disagrees with these limitations. Claim 5 only sets forth that the sensor is positioned along the central track portion. The limitations in which the Appellant speaks of are included in claim 4 wherein the Appellant has set forth that claim 4 stands or falls with claim 1. In response to the Appellant's specific argument that the prior art fails to teach the sensor positioned along the central track portion, the prior art clearly teaches (fig. 4) that the sensor is positioned along the central portion of element 16 and as argued above element 16 is interpreted as a track. Thus, the prior art anticipates claim 5.

In response to the Appellant's arguments pertaining to claims 6 & 7, again the Examiner points out that element 16 of the prior art is interpreted as a track because element 16 is connected to and moves in relation to element 26 wherein element 26 is clearly set forth as a track. In other words, one track moves in relation to another track. Thus, the prior art's alternative embodiment as shown in fig. 1 anticipates the claimed subject matter of claim 6.

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Furthermore, the Appellant goes on to state that the track set forth in claim 6 is a “movable track”. The Examiner points out that this statement supports the Examiner’s position as to why the element 16 (which includes risers 18 & 20) can be interpreted as a track. Because the prior art fails to explicitly label element 16 as a “track” does not mean that one could not deem such an element as a track.

In response to the Appellant’s arguments pertaining to claims 19 & 20, the arguments are deemed moot because the Examiner has withdrawn the rejection of claims 19 and 20.

In response to the Appellant’s arguments pertaining to claims 21 and 30 (note the rejection of claims 21 and 30 are applied under 35 USC 103), the Appellant’s first point (bottom of page 12) is addressed by stating that for all the reasons presented above the prior art does teach mounting a sensor to a track. The Appellant’s second point (bottom of page 12) is that the sensor is mounted to the “first” track in order to achieve a specific benefit. The Appellant goes on to state such a specific benefit. The Examiner points out that such a benefit is in no way claimed and thus no nexus exists between the Appellant’s argument and the claimed subject matter of claim 21, for all that the Appellant has claimed is that the “sensor is mounted to said first track”.

Next, the Appellant argues (page 13) that the prior art does not suggest mounting a sensor to a stationary track member. The Examiner points out that the Appellant has never claimed that the first track is a “stationary” track member. Next, the Appellant states that the prior art teaches

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mounting a sensor to a moving "track member" (page 13, 1st full paragraph). The Examiner points out that this statement by the Appellant supports the Examiner's main contention that element 16 of the prior art can be interpreted as a track while contradicting the Appellant's arguments that element 16 is not a track.

Finally, the Appellant has set forth that the prior art teaches away from the Appellant's invention because the prior art's sensors must be mounted to the riser members 18 and 20 in order to achieve the prior art's objectives. The Examiner simply states that such can not be true because the prior art has set forth various alternative embodiments and the embodiment shown in figure 4 does not have sensors mounted to the riser members 18 or 20.

In response to the Appellant's arguments pertaining to claims 25, 26, and 29, the Appellant has argued that the prior art does not teach mounting sensors to any type of seat track. In response, the Examiner points out that this statement contradicts the Appellant's statement above with respect to claim 21 that the prior art does mount a sensor to a seat track. In addition, for the reasons presented above, the Examiner argues that the prior art does teach mounting sensors to a seat track. As such, the seat track 16 of the prior art clearly has a reduced cross-sectional area at the center of said track 16 compared to the ends of the track (fig. 4). The seat track that the Appellant is referring to in said arguments is that of seat track 26 and is not the same seat track that the Examiner is referring to.

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In response to the Appellant's arguments pertaining to claim 27, the seat track 16 of the prior art is interpreted as having a central portion 22 located between the end portions 18 & 20. The central portion 22 clearly has a reduced cross-sectional area (fig. 4) and thus a cross-sectional area that is less than a "predetermined cross-sectional area" because the Appellant has never defined the size of the "predetermined cross-sectional area".

In response to the Appellant's arguments pertaining to claim 28, the Appellant's arguments are deemed moot because the Examiner has withdrawn the rejection of claim 28.

In response to the Appellant's arguments pertaining to claims 31 and 32, the Examiner first points out that the Appellant now introduces the term "first track assembly" in independent claim 31. The "first track assembly" is not to be confused with the term "first track" for the first track "assembly" includes the first track as well as the second track. This terminology used by the Appellant supports the earlier statement by the Examiner that in the art the two mating tracks of a seat mounted to a vehicle floor are commonly referred to, as a whole, as a track. As such, the first track assembly is on one side (left) of the seat and the second track assembly is the mirror image of the first track assembly on the opposite side (right) of the seat since the seat is known to have four legs to mount upright.

Here the Appellant has claimed that a sensor is mounted to a first track assembly. The prior art, as argued above, teaches the sensor being mounted to the second track 16. Since the

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second track is part of the first track “assembly”. The prior art teaches the first sensor assembly mounted to the first track assembly as claimed.

In response to the Appellant’s arguments pertaining to claims 33-35, the Appellant argues that the prior art does not teach a seat track having a reduced cross-sectional area. In response, the Examiner points out that track 16 of the prior art clearly has a reduced cross-sectional area (22). The Appellant is referring to seat track 26 wherein the Examiner is relying on seat track 16. Furthermore, the prior art teaches the sensors 30 being mounted to reduced cross-sectional area of the seat track 22 as the Appellant has claimed.

In response to the Appellant’s arguments pertaining to claim 36, the reduced cross-sectional area 22 of the seat track 16 is in the central portion thereof as clearly shown in fig. 4.

In response to the Appellant’s arguments pertaining to claim 37, the Appellant has presented arguments that the prior art fails to teach seat track assemblies with reduced cross-sectional areas. Furthermore, the Appellant has argued that the prior art fails to teach inboard and outboard track assemblies. The Examiner points out that claim 37 mentions nothing about cross-sectional area or anything about inboard and outboard track assemblies. Thus, there is no nexus between the claimed subject matter and said arguments.

Nonetheless, the prior art clearly shows a seat track assembly in fig. 4. This seat track assembly is on the left hand side of the seat and has been interpreted as the “first seat track

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assembly” as claimed. As such, a mirror image of this first seat track assembly is inherently present on the right hand side of the seat. The right hand side has been interpreted as the “second seat track assembly”. As evidence that a seat track assembly appears on each side of the seat. The Appellant’s attention is directed col. 2, lines 37-53 of the prior art, for in the embodiment shown in fig. 3, the prior art sets forth that four strain gauges are used, ie. one for each foot, which equates to two sides or four feet. In the embodiment shown in fig. 4, the prior art states that only two strain gauges are required. However, in fig. 4 only one is shown, the other is inherently on the opposite side of the seat.

In response to the Appellant’s arguments pertaining to claim 38 (note the rejection of claim 38 is applied under 35 USC 103), the Examiner points out that element 26 of the prior art is interpreted as the “first track” (of the first track assembly) and the exact same seat track on the opposite side of the seat is interpreted as the “third track” (of the second track assembly). The Examiner agrees with the Appellant’s position that the Examiner has admitted that the prior art does not teach a sensor mounted on the first track and likewise for the corresponding third track, but the Examiner points out that is why the rejection of claim 38 was made under 35 USC 103, for if the prior art did teach such a feature the rejection would have been applied under 35 USC 102.

Next, the Appellant argues that the prior art fails to teach seat tracks with reduced cross-sectional areas. However, the Examiner points out that no mention is made in claim 38 regarding

cross-sectional area. Thus, no nexus exists between the Appellant's arguments and the claimed subject matter.

Next, the Appellant argues that results achieved by mounting the sensor to the second track 16 would not be achieved if the sensor was mounted to the first track 26. The Examiner disagrees. The Appellant has stated in support of their arguments that the first track is a "stationary member". The Examiner points out that nowhere has the Appellant claimed that the first track is a "stationary member". The Appellant has only claimed that the first track is "mounted to a vehicle structure", and the Examiner points out that the movable track could also be interpreted as being mounted to a vehicle structure. Thus being mounted to a vehicle structure is not interpreted as meaning the track is stationary.

As such, the Appellant's arguments have no nexus to the claimed subject matter because the arguments center around the first track being stationary, however the Appellant has never claimed such a feature.

Furthermore, the Appellant has set forth that it is crucial to their invention that the sensor be mounted to a stationary track member, yet the Examiner points out that the Appellant has never claimed a stationary track member. For that reason and the reason presented above in the actual rejection, the Examiner has deemed that if the sensor of the prior art was placed on the first track member 26 instead of the second track member 16 the results would be equivalent.

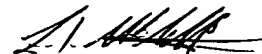
The Examiner points out that the Appellant has again at the top of page 20 of the Appeal Brief suggested that element 16 of the prior art is indeed a "track". This statement supports the Examiner position and contradicts the majority of the Appellant's arguments.

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Finally, in response to the Appellant's final argument (page 20), the Appellant has argued that the prior art teaches away from associating sensors with a track. In response, the Examiner points out that fig. 4 of the prior art clearly sets forth sensors associated with a track, so much so, that the Appellant has even stated in the preceding paragraph that the prior art teaches "mounting a sensor directly to a riser that moves with the sliding track member".

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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Primary Examiner
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April 21, 2003

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